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THE PLANTERS MANUAL:

BEING
INSTRUCTIONS
FOR

The Raifing, Planting, and
Cultivating all sorts of Fruit-Trees,
whether Stone-fruits or Pepin-fruits, with
their Natures and Seasons.

Very useful for fuch as are Curious
IN
Planting and Grafting.

BY
CHARLES COTTON *Esq*;

LONDON,
Printed for Henry Brome, at the Gun in
St. Pauls Church-yard, 1675.



TO THE READER.



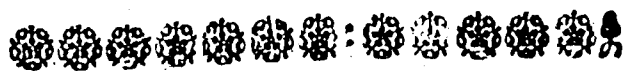
*Hough this little Treatise
of Fruit-Trees was only
written for the private
Satisfaction of a very
worthy Gentleman, who
is exceedingly curious in the choice of his
Fruits, and has great Judgment in
Planting; yet having heard that Gen-
tleman say it had given him the greatest
Satisfaction of any Bauble he had seen
of this kind, I began to think it might
not be altogether unuseful to the Pub-
lick also, and therefore sent it to the
A 3 Press,*

To the Reader.

Press, which is all the excuse I can make, either for the writing or publishing of it: But I think it fit to tell you, That although the Planter, who shall pursue the following Directions, may possibly find himself defeated in his expectation (especially in the more Northerly Provinces of this Kingdom) as to the precise time of his Fruits maturity, and that a Fruit planted and extended against a good Brick-wall, is more proper here with us (where we have never too much Sun) than an Espallier Pallisado'd at some inches distance from it; yet he will infallibly find his Industry abundantly gratified in the promised effects; at something a later Season. And although the Reader will here meet with several names of Fruits he peradventure never heard of before; yet we know and see, that
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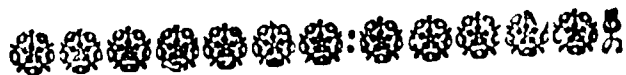
To the Reader.

more tender Plants, as Oranges, Lemons, Citrons, &c. are yearly imported from much remoter Countreys than France; and seeing that (for ought I ever heard) Fruit-Trees are no Contrabanded Commodity betwixt the Nations, I cannot conceive but that it is worth the curiosity, pains and cost to furnish our selves from thence with those of the greatest excellency, both for Beauty and Flavour; nor why we should not as well better our selves by them this way, as altogether be debauch'd by their effeminate manners, luxurious kickshaws, and fantastick fashions, by which we are already sufficiently Frenchified, and more than in the opinion of the wiser sort of men, is consistent either with the constitution, or indeed the honour of the English Nation.




Licensed March 18. 167⁴.

Roger L'Estrange.



T H E
P L A N T E R S M A N U A L .

*Instructions for the Planting and Or-
dering of Fruit-Trees.*

1. ruit-Trees are to be considered, either according to the different natures of the Fruits they bear, or according to the various Figures and Forms into which cultivated Trees are by the Art and Industry of the curious and skilful, for their better advantage and improvement, commonly ordered and disposed.

2. In the first of which Considera-
B tions,

tions, we generally and ordinarily divide them into Stone-fruits, as Cherries, Plumbs, and Peaches; and Pepin-fruits, as Apples and Pears.

3. In the second, Fruit-trees are

(a) An Espallier is a Hedg-row of Fruit-trees set pretty near to one another, so that their boughs and branches are interlaced and interwoven into one another, and in that posture supported by a frame of Wood something like a lattic'd Pale, or with rails, stakes, and other retentions, to keep them firm in the form the Gardiner has laid them.

Contrespallier, a hedg-row planted after the same manner with the other, only differing in this, that the fruit is against a Wall, and the latter in the open Air.

raised with good success four several ways; to wit, in tall Trees growing upright upon their own Bole or Stem, commonly called Standards; in (a) 1. Espalliers along by the walls, in *Hay-d'appuy*, or Espallier in the open Air, in Contrespallier, and in Shrubs or Dwarf-trees.

4. After these four ways all sorts of Fruit-trees are successfully to be raised, nevertheless there are that prosper much better in one manner than another, as we shall observe in treating of every

every one apart, without speaking in general of Stone-fruits, and Pepin-fruits, for as much as both the one and the other of these kinds are comprised in these four Figures or Postures.

Of Standards.

1. **T**HIS Figure is more natural to Fruit-trees, than to any other, for as much as experience has demonstrated to us, that all Apple-trees, Pear-trees and Apricots, as also Cherries, and Peaches do of themselves, (when let alone) thrust up a Stem, and rise from the earth to a certain stature, before they begin to form their Heads, and to shoot forth their Branches; for which reason many are of opinion, that the fruits of this sort of Tree, are better, and of a better taste, than those which are gathered from Espalliers and Dwarf-trees; and they are in the right as to the most part of fruits, particu-

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The Planter's Manual.

(b) A delicate little Pear so called. particularly the (b) Rouffelet, which is one of the most excellent and delicate sort of fruit we have.

2. Plantations of this sort are very proper for Apple-trees, which ought never to be forc'd into any other posture, unless for pleasure, or out of curiosity, one would make Dwarf-trees

(c) Pomme de Paradice is an excellent sweet Apple, that comes of a Pear-main grafted upon a Quince. of (c) Apples of Paradise grafted. They are also very good for all sorts of hard Winter

baking Pears, and almost all Summer and Autumn Pears. Plumb-trees also prosper very well after this manner, as also Cherries, particularly those which are grafted upon stocks of the

(a) Merise, the small and bitter Cherry.

(b) Quere Bigarotier, I think a party-colour'd Cherry.

(c) Griotier, a fowre Cherry.

kinds together, by reason they require

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an unequal distance, Pepin-fruits naturally requiring to be set at greater distance from one another, than Stone-fruits.

3. And herein there are two things chiefly to be observed; first, the fertility of the Soyl, and secondly, the security and shelter from winds.

4. As to the first, a man should never attempt to make a Plantation of Standards, if the ground he designs for that purpose be not very good; for otherwise it will require very great expence to make them prosper, and oftentimes this expence proves fruitless, the Trees then coming to fail, at the time when they ought to be in their perfection, as being more in debt for their growth to the Art and labour have been employed about them, than to the bounty of the Soyl where they were planted.

5. To insist upon the different natures of Moulds, and to explain the marks of their fertility or barrenness, would require a long discourse; and

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besides, all Gardeners, and others, who have been accustomed to the earth, are by their own experience and observation sufficiently acquainted with them. It will therefore be sufficient to observe in general, that there are Soyls proper for all sorts of fruits, as well Stone-fruits as others, as a black sandy Soyl, when it is fat; and that we call *Terre-franche* (which is a pure Mould or Soyl of it self, without sand, gravel or stones) when it is not too stiff, and is easie to be stirred, because in these sorts of earth, Trees find a great deal of juice to nourish them, and with great facility extend their Roots and fibers to extract nourishment from all parts. There are also other soyls, that are very good and proper for some certain fruits, and not for others, as a stiff earth is much more proper for the Apple than the Pear, and yet more for the Pear than for Stone-fruit; as on the contrary, light and sandy soyls, are more proper for stone-fruits.

6. For what concerns covert and shelter

shelter from the winds, you are to chuse a situation least exposed to those inconveniences; for which reason naked Plains and high Mountains are by no means proper situations for fruit-trees; the hollows of Valleys, or the gentle declivities and easie risings of little Hills, are much more proper: But it is withal to be observed, that the winds are to be suspected for two things; first for the fruits in the Spring, when the Trees are in blossom, and those are the North and Northwest winds, which are the most to be feared in this case: secondly, for their violence and impetuosity, which not only beat the fruit from the Trees, but very often break the Trees themselves, or at least shake them in such sort, that they become crooked and writhen, and can never rise again, nor possibly prosper; and this is a West-South-West wind, which Vent d'Aval. is the most pernicious, and of all others the most to be feared for these accidents. And as ordinarily we do not in these

these kind of Plantations, plant other than hardly fruits that are there able very well to defend themselves from the frosts, and that even the wind itself does also often hinder the frost, which it self brings along with it, we ought to be more heedful to secure a fruit-tree from the winds that blow betwixt the South and West, than from those that blow from the North-West, and the North.

7. These two things being duly observed, when you would make a Plantation of Standards in a good soyl, you must set them, if you plant Apples only, at eight fathom distance in the Order of Quincunx, which forms an Alley every way; or in simple, that is, single Alleys only, where the Trees at equal distances, stand directly, and in two right lines opposite to one another. The Quincunx Order is the more delightful, provided the Trees be set at a very great distance the one from the other, for otherwise they are apt to shoulder and crowd one another in this

this kind of Order, and to shade one another on every side. If you would mix Pear-trees in equal number with your Apples, six or seven fathom is then distance enough, and for Pears only, six is as much as is required.

8. And although all Planters almost commit an error in not duly observing this distance (for they covet a great number of Trees, and think they should not husband their ground to sufficient advantage, if they did not set them more thick) nevertheless it is most certain, that two Trees set at a fit distance, and that have all day long the benefit of the Sun, without being skreen'd from it by any too neighbouring shade, are worth above twenty that touch and offend one another. And when the Plants are set too near together, it is not discerned at first, but just at the time when they should be in their perfection, they are found to be good for nothing; but when they are placed at the forementioned distance, they still grow better and better, and bear

bear both much more, and far better fruit, as having had greater benefit, both of the Air and Sun. Moreover, they hinder not the Plot where they grow, from being employed to other uses, to the producing of all sorts of Grain, wherein also the labour that is bestowed upon the one, is of very signal advantage to the other.

9. This separation and equal distances of Trees, is very necessary, not only for the pleasure of the eye, which is infinitely delighted with this symmetry and uniform Order; but also by reason that this equal distance is the cause that the earth equally distributes nourishment to them all alike, and gives them equal strength and vigour.

10. The distance of Trees being thus observed, holes are next to be made to plant them in, which are also to be digged and turned up six foot square, or thereabouts, and two or three foot deep; which if they were made a whole year before you plant
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your Trees, so that the earth which is cast up, and that which remains in the bottom, might receive the Air, the Sun and the Rain, during the four Seasons of the Year, the Trees would doubtless prosper infinitely better; the reason of which is, that the earth being cold and dry in its own nature (both of them qualities contrary to generation) can produce nothing of it self, and only becomes fruitful by the mixture of the contrary qualities it receives from the Sun, the Air and the Rain. And therefore it is, that a stiff or stony Soyl produces nothing to purpose, by reason they are so thick and stiff, that they cannot be penetrated by the other Elements. It is with the earth in some sort, as with the water, of which the best is that which soonest, and with greatest facility receives the strange and uncouth qualities that are applied unto it, which is the reason that we experimentally see, that the new earth drawn from the bottom of some deep Pit, remains a long time
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barren, till it has received its fertility from the mixture and participation of the other Elements, and then, that is to say, a year after, or thereabouts, it begins to produce Grass and Simples. And that also is the reason why the uppermost Mould of the earth is always better, more fat and fertile, than that which is lower within. Now if the earth drawn out of these holes, had been in like manner long exposed to all the influences of the Air, without doubt it would assume these good qualities, as well at least as that in the bottom (which also in some sort participates of the benefit) by which means whoever should plant his Trees in this earth, would find it much more nourishing, and should have a better account of his Plantation.

11. This Rule may indifferently serve for all sorts of Trees, and chiefly for the Trenches you make for the Espalliers, because that way of planting, both requires and deserves more care than all the others, but it is nevertheless

less seldom or never put in practice; for as much as very few have the patience to stay a whole year after they have once taken a resolution to plant, and have set forth ground for that purpose, and they look upon this long preparation as a loss of too much time, wherein a Tree might already have taken good root, and have advanced so much towards its perfection. As for what concerns Espalliers, there is yet another inconvenience that hinders them, which shall also be spoken of in its due place.

12. The holes being thus made, you are in the next place to cull out Trees all of one and the same stature, and those either already grafted (which is by much the best, for the reasons shall be given when I come to speak of Pepin-fruits) or if those are not to be had, then stocks of the same height to graft upon, that is of six or seven foot on the Bole, and about two or three inches thick (for you must ever be careful to measure the height to this proportion
of

of thickness) which also are to be chosen straight, and carefully pulled up with all their roots. In planting of which, it will be very good to give them some help under the root, of fat earth, or dung well rotten, and earth mixt together (wherein you are also to be careful, that the dung do not touch the root) for one may easily assist a Tree already planted from above, but we never rise again under the root to help it there.

13. Before you place the Tree in the hole designed for it, you must refresh the root by neatly cutting off the extremities with your pruning-knife; and you are always to cut them on the under-side, so that the wounds and cuttings may exactly be placed upon the earth; for it is from those cuts that the Tree thrusts out its first rays and fibers, which by this means creep into, and disperse themselves thorow the upper Mould, and cause the Tree to take faster hold, and to stand firm.

14. Dung, fat earth, and all the other

ther improvers which shall be treated of, when we come to speak of planting Espalliers, are also very good for great Trees; but they are not so necessary. And as it would be a matter of great difficulty to employ this particular care in great Plantations, that take up great spaces of ground; so also when the Soyl it self is very good, Trees prosper well enough without all these helps.

15. You must not set them too deep in the earth; for besides that, Roots buried too low in the ground, do not sufficiently participate of the influences of the Air, there is another inconvenience in it, which is, that the earth above being always the better, and the Tree receiving the nourishment that comes from thence, as that which is most proper for it; if it be set too deep, it thrusts forth new roots above to attract the nutriment of the better earth, and often suffers those below to decay and perish, which does not only incommode, but very often wholly de-

destroys the Tree. It will therefore be enough to set the root a foot deep only in the earth, wherein you are to take care to cover it with new Mould that is not lumpy, and with your hand to dispose it all about the little strings and fibers of the roots, that there may be no cavities betwixt the earth and the root; for such vacuities would infallibly beget rottenness and ruin.

16. It is good also to shoulder or clod up the Tree for three foot about, and some four foot high, and afterwards in labouring it over again by little and little, to abate the heap, till the earth be again settled to its former level.

17. It is also very convenient to cover the Trees by raising straw to a certain height round about the Stem, by which means the bark will retain its beauty, the sap will not be exhausted by the heat of the Sun, and it will be preserved from Moss.

18. If the root of the Tree be not of it self strong enough to withstand the force of the winds, it ought to be
propt

propt and supported with a stake, or a good strong Pole almost of its own height; but then you must take heed this prop be not of cloven or sawn Wood with edges, neither gouty, nor full of knots; lest it should hurt the Tree, and gall or wound the bark; but it must be round, and tyed after such manner, that it do not interfere with the Tree; to prevent which, there must also be straw or hay lapt betwixt them.

19. Some use to prune the Trees before they set them, both by reason it is to be done at greater ease in hand, than when they are planted; and moreover, because the force of pruning is apt to shake them when they are already set in their places; but withal, men usually planting in the beginning of Winter, the frosts and other injuries of that rude Season, do sometimes incommode a Tree so lately wounded, and pierce deeper into its heart by such overtures. Wherefore it is better to stay till the Spring before you

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lop or cut them, especially if year-old grafts, which also must be so done, as almost to leave them no branches at all, to the end, that having so much less Wood to maintain, they may the better recover and take new root with greater vigour.

20. It is very requisite to rank the Trees according to their kinds: as for example, to set one whole row of Renate-Apples, and another of Summer-Pears, and all in such sort, that the principal fruits, and those that are the best, and will longest keep, be in much greater number than those which are planted for curiosity only, and will not keep so long as Summer-fruits, though they are very excellent in their kind.

21. In the whole body of a Plantation ranged in this Order, you are by no means to mix any Stone-fruits at all; but you may plant them in the Alleys that are round about it, placing

* A sweet sort of Plumbs, Cherries, Cherries

Grioters, * Guiniers, and Bigarotiers, at six and six yards

yards distance one from another, or further off, especially the Bigarotiers, which extend their branches very far when grafted upon the Merisier.

22. Now all these Instructions presuppose a good Soyl, without which a man should not over-easily be induced to undertake these kind of Plantations, but content himself with Espalliers and Dwarf-Trees only, which take up less ground, and that consequently is with greater ease to be prepared, by introducing good earth into barren and ungrateful places: but notwithstanding, if you will needs plant in an ill Soyl, you must then open your holes eight foot square, and three foot deep, and separate the better and more likely earth that is turned out (which is commonly the uppermost) from the rest, and afterwards fill them up with that select Mould, and other that shall be brought in, of the best can be found, with a great deal of very old and rotten dung and marl, or the scowring of Pools or Fish-ponds, provided it have

lain at least a year before ; for it would otherwise be too cold for the Trees, and make them die, as on the contrary, dung is too hot, if not well consumed ; and especially (as hath been before observed) you must take good heed, that the Roots touch not the dung, but that there be always earth between.

23. With this expence Trees may be made to prosper in any Soyl whatever. Nevertheless, if it be so stiff a clay, or so stony a ground, that the Trees cannot at all pierce it with their roots, then the forementioned holes will be yet too little to supply a Tree with so much nourishment as is necessary for its due and expected growth ; and you must make them still more large, for otherwise the roots of the Trees coming to touch the earth, which is so much an enemy to them, stop short, and curl themselves back again into the hole from whence they came, where they work the same effect with Trees planted in boxes, and presently devour all the vertue of the good

good earth was put into them.

24. Plantations of great and full-grown Fruit-trees, require also to be husbanded as well as the others, and you must bestow labour upon them at least four times a Year ; to wit, in the beginning, and at the end of Winter, and then as deep as you can ; and twice in Summer only to kill the grass, and to keep the earth from growing hard and parching with the Sun ; wherein you are to rely very much upon the labourers dexterity and care, to cultivate all these Plantations with the Plough, & yet there is no other way to turn up so much ground as they possess when they are of great extent, without an excessive charge ; but you may give the Husbandman caution to bring his Plough within a certain distance of the Trees only to avoid accidents, and to turn up the remainder with the Spade, the Hoe, and the Mattock.

25. Now the deep husbandry or digging that is used to Trees in the beginning, and at the end of Winter,

produces several good effects ; for by this means the good earth, which is always uppermost, is turned down to nourish the Tree, and the lower earth is laid aloft to be made better and more fertile, by the same reasons ; and it will also fall out, that all the moisture and fatness which comes from above, will penetrate to the bottom, which by that means will be kept supple and light, and consequently easie to be penetrated by the new roots that put out, which are like so many little emulgent veins by which the Tree extracts its nourishment from all parts.

26. But on the contrary, in Summer you are by no means to stir the earth too deep, lest the heat pierce too far into it, and hurt the roots of the Trees ; and besides, the Husbandry will be sufficient if you kill the ill weeds, and hinder the earth from crusting too much with the heat of the Sun.

27. You may also make Plantations of this sort of Stone-fruits in tall Trees, and they are very pleasant when

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separated according to their different kinds ; as for example, a Cherry-Orchard in one place, a Plumb-Orchard in another, and a Peach-Orchard in a third, which Plants are also to be cultivated after the same manner as the others, observing only the difference of their distances and stations. Plumbs, Apricots, Cherries, Bigarotiers and Griotiers require to be planted at six yards distance betwixt Tree and Tree, and rather more. Cherries not grafted, or that are grafted upon other Cherry-stocks, do not require so great a distance, and it will be sufficient to plant them at the distance of betwixt twelve and fifteen foot, and Peach-trees the same : But it is to be noted, that Peaches and Apricots are very impatient of frosts and great winds, and therefore cannot prosper if not planted in such a place of advantage, as shall secure and shelter them from these assaults.

28. There are two seasons proper for planting, namely, Autumn, and

the Spring ; for Summer is totally unfit, both by reason of its violent heat, and also the sap of the Trees being then in their branches, they would wither in transplanting, and cause the Tree it self to die ; neither is Winter proper, by reason of the frosts and great rains which deprive the earth of such a disposition as is necessary for the entertaining of Plants, unless in a dry Soyl, where the earth does not clog nor run into mortar, and in such a place one may plant even in the rain. The beginning of the Spring, when the earth begins to dry a little, is good for several sorts of Trees ; but for Fruit-trees, Autumn is incomparably better, than any other season. One may plant presently after *September*, that is to say, in the middle of *October*, or about that time, by reason that then the sap retires from the branches into the root, which so soon soever as it shall happen, a Tree is to be removed without any manner of danger, forasmuch as the sap of the Tree is no longer

longer in the heart, but in the rind or bark only, and that is the reason why we sometimes see Trees totally decayed and rotten at the heart, which yet fail not for all that of bearing fair and good fruit, the sap communicating its nourishment to the branches by the bark only ; wherefore when the sap shall no more appear in the bark, it is a good time to plant. The advantage of planting betimes is twofold ; for in this season one may easily make choice of fair days, and a fair Sun for this purpose, which is a thing that very much contributes to the making Plants to prosper ; and moreover, the earth that is then stirred being sound, and not as yet oversoaked, easily crumbles and moulders about the root, and keeps it in a good Mould the whole year about. But there is yet another, and a very considerable reason, which is, that Trees early planted, recover themselves before Winter, and find themselves already strong, and well acquainted with the Soyl when they are

are to put out in the Spring; for the sap which in Winter is retired into the root, does no more lye idle in this Season, than any of the other three, but puts out new threds and fibers from the root, as experience shews; and it is most certain, that plant a Tree in good earth in *October*, and take it up again in *January*, and you will find it has put out new roots; and so by this early planting you secure the Tree against the heat of Summer, and moreover, gain half a year in its growth.

29. Yet is it not all, to have planted Fruit-trees well, and to have prepared the ground with all imaginable pains and care, you must moreover be careful to correct them, to take away the superfluous branches, and to hinder the good from being pestered and incommodated with those that are useless and good for nothing. Nature 'tis true, does ever labour towards her perfection, but she cannot arrive at it without being assisted by Art. Trees when planted in a fruitful Soyl, do voluntarily

luntarily, dispose themselves towards their most advantageous Figure and Proportion; but you must also help and assist them, that they may arrive at the perfection for which they strive. This, whilst they are yet very young, and that the branches you would take away are small, is to be done with the pruning-knife, and when grown stronger, with the Joyners Chisel and a Mallet; but that is never to be done the first year, for it is enough at first if the Tree take, without demanding any more, you must be content to receive all the branches it will present you, and it will be time enough a year after to make your choice, to take away the bad, and to preserve the good. It is with Trees newly planted, as with young Horses, which we never go about to manage in their first years, but are content to see that they feed well and thrive. You must notwithstanding begin betimes to cut your Trees, that is to say, the second year, or at the latest, the third; for it is much easier

to bring them to a handsom head, when you begin so soon, than if you should defer it longer, and the Tree suffers less when the superfluous branches are taken away in their shooting, than when you shall be obliged to cut them off when thicker, and grown more strong.

30. There is no precise instruction to be given for the cutting of great Trees, and therefore the eye and judgment of the Workman must be his rule; only you are in general to observe, whether in pruning young Trees lately planted, or cutting those of longer standing, not to suffer branches to grow over one another, nor to leave too much wood upon the Tree, and so to cleanse it, that the branches may not shade one another; as also to take away a great number of the little branches that grow within the Tree, and that almost never bear any fruit; but withal, you are to have a special care to cut what you take away very even, and close by the trunk of the Tree, to
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the end that the sap which rises may presently cover the wound with a new bark. For this purpose the Joyners Chizels are exceeding proper, and those you are to have of several breadths, according to the branches you would cut. This instrument is also of better use for this kind of work, when helved upon the end of a broken half-Pike, or any other staff of eight, ten, or twelve foot-long, by which means, without climbing a Tree, you may at great ease take away all you desire, and may better chuse out the useless branches mixt with the others, to cut them with much greater facility than with a pruning-knife. You must also evermore observe to cut and prune your Trees always in the wain, especially that of *January* and *February*; not but that you may cut strong and able Trees in the wain of *November* and *December* also.

31. All sorts of Trees endure the knife, and willingly part with their superfluous wood whilst young and
grow-

growing; but the Apple-tree will not part with his branches when a little in years, and that he is already arrived at his perfection, for as much as he has much ado to recover, and oftentimes perishes by the wound. The Cherry-tree also, the Bigarotier and Apricot, are impatient of dressing when old, unless totally lopt off, to make them shoot forth new heads. The Pear and Plumb submit better to the knife, especially the Pear.

32. When there is rotten Wood got into a Tree, you must be careful to cut it out with a kind of hollow Chisel the Joiners call a Gouge, which is to be handled after the same manner you do the ordinary Chisel, and is a very proper instrument to enter into the body of the Tree, and to scoop out all that is dry and rotten, without endamaging the rest.

33. Moss is prevented from growing round a Tree, by littering them up with straw, as has before been directed; but when it is once come, you must take

take care to scrape it off with a wooden knife, or by rubbing the bark of the Tree to which it clings, with a new coarse cloth, or a good hard wisp of straw after rain, when it will fall off with greater ease.

34. As Standards have many things proper for them in common, with the others that are raised in different forms, so many of these instruments that are properly made for the one, may indifferently be employed about the other; and it is also certain, that if we would take the same pains, and make the same preparation for the planting of Standards, which ought to be observed in Espalliers, they would prosper infinitely better; wherefore, the curious, who will not spare for cost, would do well to prepare the earth after the same manner, both for the one and the other.

Of Espalliers.

1. **W**E call those Trees Espalliers which are pallisado'd along the Walls, and are with good reason esteemed above all other ways of planting, principally for four things.

2. First, for their Beauty, for they are an exceeding great ornament to a Garden, when well sustained, and neatly kept, and that we see them interwoven in good order along by the Walls, and all covered over with their leaves and fruits.

3. Secondly, for the rarity of their fruits, for as much as the best, and those that are most rare, as the Bergamot, the Winter Boncrestien, and most of

(a) I take a Pavie to be a Nectrine, though *Cotgrave* calls it a bastard Peach, or a fruit like a Peach.

(a) Nectrines, which prosper not in Standards, easily ripen and come to per-

fection in Espalliers.

4. Thirdly

4. Thirdly, for the quality of their fruits, it being most certain, that even those which prosper best in the open Air, are incomparably better in Espalliers, both for largeness and colour.

5. Fourthly, for their abundance, which is such, that when an Espallier is well supported, you must always pull off above half the blossoms with which it overcharges it self, and very often a great many more after they are knit, whereas this abundance is very rare in Standards; and if it one year happen by chance, the two following shall either be totally without fruit, or at least they will be very thin.

6. All which advantages proceed from the heat of the Sun, which is very much augmented by the repercussion of the Wall, and from the shelter they receive in such a location from the injury of winds, to the violence whereof these Trees are not subject, as being totally defended on the one side by the Wall, and on the others, being tyed and complicated within one another,

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ther, they can receive no harm.

7. Espalliers also require more care and labour than all other sorts of Plantations, wherefore well to examine all that is necessarily required to bring them to their perfection, it will be convenient to consider, what is to be done before you plant them, both as to the preparing of the earth, and the choice of the situation, which are both to be duly considered in planting this sort of Trees; as also what is to be done after they are planted, to cultivate and improve them.

What is to be observed before the Planting of Espalliers.

1. **T**He first thing that he who will plant an Espallier is to observe, is to expose it to a good aspect of the Sun. Art and labour can effect all other necessary things in any situation whatever, but for this it is impossible

ssible to have it, if we do not meet him at his first arrival.

2. There are two good Positions which ought always to be observed in the planting of Espalliers in Gardens, and that may also indifferently serve for all other sorts of Plantations; of which the first is that which has the Sun full upon it at his first rising, or presently after, and retains it till two or three of the clock in the afternoon; the second is that which begins to receive the Sun about ten a clock in the morning, and loses it not till it go down. These two Positions are almost equally good, for they have the one as much heat as the other, though there is notwithstanding a certain principal vertue observed in the rising Sun, which causes those Espalliers which are exposed unto it, to be both sooner ripe, and of a better colour than those in the other Position; which also proceeds from this, that at the end of Winter, and in the beginning of the Spring, the Sun dwells much

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longer upon this Position, than upon the other, for it almost continually shines upon it, from the rising to the setting. The second Position has also another advantage particular to it, which is, that it is less exposed to the danger of frosts than the other, by reason that the frost does little harm to Trees in the Spring, unless the Sun dash upon them whilst the frost is yet hanging on; for then the two contrary qualities of heat and cold beget a conflict, which the Tree is so sensible of, that the leaves and blossoms thereof appear stricken and blasted; but when the frost dissolves of it self, before the Sun comes to shine upon it, it does no harm at all, and afterwards drops off as innocently as dew. The first Position receiving the Sun from its first rising, if there have a frost hapned in the night upon the Trees, they are then subject to this accident; but on the contrary, the Sun only beginning to shine upon the second at ten or eleven of the clock, if a frost have hapned

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in the night, it is absolutely thawed and dissolved of it self before the Sun comes to strike upon it. There are also some Soyls so burning, that the first Position is too hot, so that oft-times the fruits by the excessiveness of the heat, cannot arrive at their full proportion and fairness. But, to conclude, all things duly considered, the first is the better for fruits that require a very hot Sun, as * Mus- * A Musk Cherry. a' - cats and Peaches; so a Muscadine grape. and the second is as much to be esteemed for Pears.

3. These two Positions are the best of all others, not only in respect to the heat of the Sun, which is doubtless the principal reason; but also because they defend the Espalliers from the North and Northwest winds, which are the worst for frosts, especially the Northwest, which commonly blows in the Spring, and which is so much the more dangerous, because it very often brings with it a frost after little rains, which soften the Trees, and

render them more penetrable, and apt to freeze. Of these two Positions the first is totally covered from that, and the second from the North.

4. All the principal and most delicate fruits, as Peaches, Pavies, Bonchrestiens and Bergamots, ought to be plac'd in these Positions. There are others nevertheless which are not wholly to be rejected, and may do very well for more hardly fruits, as all Summer-Pears, and some Winter-Pears also, as shall be explained in the Catalogue of Fruits.

5. The place being thus chosen, the Wall which is to support the Espallier, must be twelve or thirteen foot high, to the end the Tree may have its utmost stretch when it shall come to perfection. It ought also to be pargetted or rough-cast, either with Plaister or Lime, not for ornament only, and to make it more handsom; but also by reason that a thousand mischievous things, snails, worms, and other corruptions, breed in Walls that are made of

of mud only, and Rats, Mice, and other Vermine, shelter themselves in the holes and cavities which they there find, and very much annoy the fruits. If in building these Walls you would there place little Sheep-shancks in the Order of a Quincunx, the Lozenges whereof to be four or five inches square, and those to peep an inch only out of the rough-cast, you would find them of great use, and the Pallisado of your Trees would be made at much greater ease, and much less expence. 'Tis true, one may make shift to fasten them into the Walls already made, but never in so good order, as if plac'd in building the Wall. The use of these Sheeps-bones shall be explained, when we come to speak of the manner after which Espalliers ought to be Pallisado'd.

6. These things thus done, nothing more remains, but only to prepare the earth, of which there is some so good of it self as seems to require no manner of help, and to be capable of producing

ducing fruits in their greatest excellence, without other assistance than the ordinary pains and culture. There is also on the other side some Soyls of so malevolent a nature, as can never be made to produce any thing that is good ; and that a man is forc'd totally to remove, to bring better into its place, if he intend to have his Trees to prosper. However, that which is contained in this Article, ought notwithstanding to be equally observed in all sorts of Soyl, if not in that which is so abominably bad, as that it must be totally removed. But a man ought never so much to presume upon the bounty of a Soyl, as to neglect any part of his preparation ; for if it be able of it self to produce fruit that is very good, it will produce incomparably better if seconded and assisted, and that to its own fertility it shall receive all the advantages and improvements, the Art and industry of the Gardiner can add unto it. You are then to open a Trench eight foot wide, and three foot

foot deep, and to dig it sloping, that is, wider at the top than the bottom, on that side next the Wall, to the end that this overture may not endanger the Walls foundation ; and in casting out the Earth, you must separate the good from the bad, that the Trench may only be filled up again with the best, and that the worst may not again be thrown into it. If you could leave this Trench open a whole year before you fill it up again, undoubtedly the earth, at the bottom, by so long lying exposed to the open Air, as also that which has been thrown out, would receive a very great advantage, for the reasons before given, in the tenth and twelfth Articles of the Chapter concerning Standards : But besides, that a man can very hardly perswade himself to so much patience, it is to be feared, that the Wall in the mean time would fall, or be very much weakned, the foundations of it being in a manner wholly laid open. The earth being thus thrown out, you should then lay in

in the bottom of the Trench a bed of half a foot or eight inches thick of good fat earth, drawn a year or two before out of the bottom of some Marish or Fish-pond, and well consumed in that time; or Turf digged out of some green high-way, where there is only short grass, and no twitch-grass, nor other sorts that devour the fatness of the earth. This Turf ought not to be flead off above four inches thick, and being got betimes in the year, is excellent for Trees; for the salt of this earth, which has long lain idle, still mounts upward, and is attracted by the heat of the Sun, and the little nourishment that short grass requires, has nothing wasted its substance, so that it remains entirely in the Turf; but then you must break and mince it in the Trench, till it be in a manner reduced to powder. You are then to lay a bed of old dung very well rotten, and well wasted, of four inches, or half a foot thick, and another bed of the best of the earth that
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was turned out of your Trench; which three different beds must be wrought with very great labour, and such as shall shuffle and mix them with one another (which is to be done with the spade) until all these different things make up one body together; after which you are also to lay three other distinct beds of the same substances, which must also be laboured after the same manner, till the Trench be heapt up half a foot above the level of the Alley, forasmuch as the earth so rost and tumbled will shrink so much at least, when the Winter or the rains have deprest and washt down the Husbandry. If you have none of this fat Soyl of Pond-earth or Turf, you must then put in so much the more dung, you may also throw in the shovlings of some old ditch exposed to the South-Sun, which are commonly very good, or the sweepings of Courts, and any thing whatever that Gardiners know to be good to mend the Soyl, provided it be well wasted, and is not
too

too hot : but you shall have a particular Chapter of what is to be observed in the choice of all sorts of Dung and Manure.

7. It is of very great importance to give all these Manurings to the earth you prepare for Espalliers at the first, to the end that the Trees being once planted, you may not need to give it any more improvement, at least of a very long time after ; and by this means also, when the Trees shall come to bear, the Dung being totally consumed and turned to earth, will give no ill relish to the fruits they shall produce, which oft-times falls out, when they lay a great deal of Dung to Trees already settled in their place.

8. If peradventure you shall not have sufficient store of dung plentifully to furnish the bottom, and your upper bed too, you must then dispose the greatest quantity into the bottom, still reserving some, but the lesser share for the bed above, because you may at ease, at any time, supply that defect in the

the upper part of the earth, and as oft as you shall think fit ; but the Trees being once planted, you can no more dive under their roots to give them any improvement there.

9. It is good to lay the Alleys of your Espalliers round and high ridged in the middle, so that the midst of your Walk may lye higher than your Espallier, to the end that the rain which shoots from the Alley may run into it ; and also, that the helps you give it may remain, and not be washt away.

10. This way of preparing the earth is principally for Pear-trees ; for Peaches and Apricots are to be planted with less ado, and do not indeed require so much dung ; but you must not fail, even for them as well as the other, to open the earth the same wideness and depth, though you turn in the same earth simply as it came out, without any mixture or help at all, for as much as the roots of the Trees delight in this rised and lightned earth, and come on more in one year, than they would do in any other in many. *Of*

*Of what is to be observed in Plant-
ing Espalliers.*

1. **A**Ll these things being thus ordered and disposed, you are next to observe the distance at which your Trees are to be set; wherein also you are to be guided by the nature of the Trees themselves, and are to plant them at several distances according to their different kinds: For Plumbs, Apricots and Cherries are to be planted at six yards distance from one another, by reason that their branches extend themselves very far; and Pear-trees at the distance of fifteen foot, or four yards at the least, because they do not spread so wide.

2. In the earth prepared after the manner prescribed in the foregoing Chapter, you are to make little holes of about three or four foot square, and a foot deep, in such sort that it may easily

easily receive all the roots of the Tree you design for that place; which being done, you must take old dung very rotten, or fat earth that has lain very long, and mix it very well with twice as much earth, and put part over, and part under the roots of the Tree, which you are to set half a foot within the earth, and a foot from the Wall, sloping and leaning towards it, so that the Bole appearing above ground, may not be above three inches from the Wall; for to tye and fasten the branches as they ought to be, it must not be too far off, and the root being more remote, extracts also some nourishment from the earth, that is betwixt the Wall and it. You must also refresh the roots with the Pruning-knife, after the manner set down in the thirteenth Article of the Chapter of Standards, leaving all the hairy Fibers you can possibly save; and be sure the roots be well covered with that mixt earth, so that no vacuities remain, as has been said before.

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3. You are also to have a care, that the Dung touch not the roots, because it would heat them too much, and the Summer following peradventure make them die, unless it be so old and rotten, as that it has lost all its heat, and that it be in a manner reduc'd to earth. It is good to forbear cutting the Trees you set, till after the great colds are past, that is to say, till the wain of *January* and *February*, and set them at first entire, without taking away any of their branches, for the reasons already given, in the tenth Article of the forenamed Chapter of Standards.

4. When you prune Trees, you are to cut them sloping in form of a Hind's foot; and observe, that the Cut be on that side next to the Wall, to the end it may not be exposed to the Sun, which otherwise would make a cleft and a wound, that would hurt it very much; which place so cut, should also be plastered and covered over with the purest earth, or that and hay tempered and mixt together, or plastered with a cer-

certain Gum the Embroiderers commonly use.

5. You ought to leave but very few branches upon the Trees you plant after this manner; for those that shall sprout out new will be much better, and more easie to govern, than those you take away.

6. You may begin to plant immediately after the Month of *September*, that is to say, in the beginning, or in the middle of *October*, and the sooner you begin the better; but if the earth should then prove too dry, and not yet soakt enough with the rain, you must then abundantly water the Trees that are set so soon.

7. Some there are, who in planting have a great regard to the Moon, and believe the wain to be much more proper for this work than the increase; but experience shews this Observation to be vain: It is much better ('tis true) to prune in the decrease, than the increase; but you may (as I have said elsewhere) defer pruning a long time
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after they are planted.

8. You ought to be very curious and careful in the choice you make of those kinds of Fruit you intend for Espalliers, and never should plant any, but those that can prosper no other way, or that are so excellent you desire they should never fail, or that you would have in greater perfection; for they thrive to a greater largeness, and come to a better colour in Espalliers, than otherwise, and infallibly bear every year. Of these the Bonchrestien, and the Bergamot are the chief; the Roussellet, and the little Muscat of the Summer-Pears, the Amadoste, the Portail, and the Saint Lezin of the Winter-Pears are the next. All which different kinds shall be more fully handled in the Catalogue of Pears, in which every one shall find the kinds he most affects, and has the greatest desire to have, and how they are to be planted for their better propagation. Only you may in the mean time observe, that the Bonchrestien being without comparison

son by much the best of all Pears, as well by reason of its beauty, as because it keeps longer than any other, you ought to plant in your Espalliers six times as many of them, as of any other kind.

9. As to what concerns Stone-fruits, besides what shall be said of them in their Catalogue, you are to observe the two same things in your choice of them. Apricots prosper no other way but in Espalliers only; but although their fruit be beautiful and very good, you are not notwithstanding to plant many of them, for they bear in too great abundance, and continue but a very little while. As for Plumbs, they prosper very well in the open Air, and well enough resist the frosts and winds, and therefore it would be to no purpose to usurp the place of Espalliers for them, if not for the white and red Pordrignon only, which are the tenderest of all Plumbs, and of which the Fruit is also preferred before all the rest. Peaches of all other Fruit-trees,

do most require all the advantages of an Espallier, that is to say, a very hot Sun, and a good shelter against the agitation of the winds, for which reason there are very few places where they can come to their perfection, unless they be clapt up close to a Wall; wherefore as their fruit is of the best sort, both for relish and beauty, so it ought to make up the greater and more principal part of your best Espalliers, if not an entire Espallier of themselves. Those therefore who have a great many Walls, would do well to make a whole Espallier of Peaches only, on that side where the Sun is most violent, which is the first of the two Positions observed in the foregoing Chapter, and plant the Pear-trees in the second. And being that Peach-trees require a greater distance for the extention of their branches, one may with great ease, and very good success, make an Espallier of

* Muscat Grapes.

Peaches and * Muscats, of three foot high

high along by the Wall, which is the ordinary height of the stocks of Vines, and plant Peaches of three foot of the Stem, which will begin to extend their branches over the Muscats; but then for this purpose you must chuse Peach-trees raised from the stone, or that are grafted upon stocks of Almonds or Apricots, which are raised from the stone, and not upon Plumb-stocks, by reason that the roots of the Plumb-trees too much importune their neighbours, and run out so soon every way to seek for nourishment, as even to thrust new sprouts or suckers out of the ground, which would very much endamage the Muscats growing near them.

10. Such as are well acquainted with the difference betwixt Pear-trees grafted upon Quinces, and those which are grafted upon wild stocks, always chuse the first for their Espalliers; for it is certain that the Pear-tree grafted upon a Quince-stock, Pallisado's much better, puts not out so much wood,

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bears twenty times more fruit, and nourishes them incomparably larger and fairer, than that upon the wild stock; and moreover, the Trenches and improvements have been added to the earth in which they are planted, continues much longer with the Quinces, than the others, by reason they spread not their roots so far, and yet attract every whit as much nourishment, as appears by their putting out many more hairy suckers and fibers. It is true, that the Beure, the Orange-Pear, the Bezidery and the Portail, prosper as well upon the wild stock; but they are much better upon the Quince, though the Portail (to say the truth) is not so tart upon the wild stock, and has ordinarily a better taste. As to what concerns the choice of Apple and Pear-Quinces, and their different natures, you are to consult the Chapter of Pepin-fruits.

11. Pear-Quinces not yet grafted, are sometimes planted in Espalliers to graft them afterwards upon the place, which

which is done the second year, in the Month of *August*, * Which is by way *en* * *ail dormant*, of Inoculation. which is the best way for Pear-Quinces, after the manner set down in the Chapter of Nurseries for Pepin-fruits. In case it be grafted after this manner, the Quince that is planted is not to be above an inch, or two inches higher than the earth, for as much as you are to set the *ail dormant* upon the first years shoot; and when you plant Trees already grafted, you must take good heed, that the Graft be always four fingers above the earth, lest the Tree should take root from the graft, by which means it would loose the advantages it receives from the root of the Quince, in having others of another quality, and such as would make it bear a great deal more wood than fruit; which Observation may also serve for all sorts of Trees grafted upon the Quince, and for Apple-trees grafted upon a stock of a Pepin, of the *Pomme-de-Paradis*, which are exceed-

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ingly subject to take root from the Graft; wherefore, if the Trees have been planted too deep at first, so that the Graft be covered with earth, you must have a care at the time when you give them the greatest culture, in the beginning and at the end of Winter, to bare them, to see if they do not put forth some threds and little roots from the Graft, and if they have, always to cut them away.

12. Those who at first only plant Quinces afterward to graft upon, may deliver themselves from the impatience of expecting so long till their Walls were covered, and their Espalliers come to bear fruit, if in separating their Quinces fifteen foot from one another, which is the usual distance, they would plant a Peach between, which shoots much sooner, and presently furnishes the Wall, both with his leaves and fruit; by which means one may stay very well till the Pear-trees come to perfection, enjoying the Peaches in the mean time, and
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by that time the other shall be arrived at their perfection, the Peach-trees, which are not so long-liv'd, will begin to decline, and in a few years easily yield them their whole room.

*What is to be observed in cultivating
Espalliers already planted.*

1. **T**He principal care you ought to have the first year the Trees are planted, is that they take well below, and put out above with vigour; and therefore it is, that you are not so much to think of taking away their superfluous branches, as of guiding and conducting them in this beginning, and to preserve them from the great droughts and ardours of the Sun, from the grass that would choak them, and other things that often make them die in Summer, if not preserved by the Gardiners care. In case therefore that the Trees do not shoot with
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very great force and vigour, I would not meddle with their branches, if not gently, and without violence to ply and bend them towards the form they are afterwards to receive; as also, when you see their branches shoot straight up, and that they are lusty and liking shoots, you may sometimes stop their progress by nipping off the extremities with your nail only, to the end that they may fork out below, and put out to furnish the two sides: but generally speaking, you are to observe touching Espalliers, what has been said concerning tall Standards, in the third Article of that Chapter.

2. The chief care of him who cultivates an Espallier in this first year, after he has given it its due labour in the beginning of *March*, ought to be to defend it from dryness, which sometimes in that Month is very great, and to that degree, that the drought of *March* is oftentimes more dangerous than the heat of the whole Summer by reason that the Trees are not as

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that time yet enough established in the earth; and therefore are by so much the more obnoxious to the accidents contrary to them, by how much they are of less power to resist them. The remedy of which is, to put about the Tree, for four foot, or thereabouts, half a foot thickness of dung not yet sufficiently consumed, upon the new-stirred earth; which covering will keep the earth in the same condition it finds it, and defends it well from the drought: but in case you may not have dung enough to cover all your Trees, you may lay heaps of grass and weeds; but then they must have no roots, lest they should take hold of the earth; or for need you may also supply that defect with Hay, and in the Month of *June* there is nothing better for this purpose, and to keep the great heat of the Sun from overdrying and parching the earth, than to lay Fearn, that is yet green, and not much withered; a covering that does very much defend the earth, both from this dryness,

dryness, as also to keep it supple, and to hinder it from washing away, if there should happen any violent rain. The dung does however more befriended the Soyl, in that its saltness and fat still sinks into the earth, especially when the rains fall, and makes it still more and more fertile.

3. As to the several labours that are necessary for the prosperity of your Plantation, all Trees, whether newly planted, or of older standing, require at least four every year. The first at the end of Winter, that is to say, in the beginning of *March*, which ought to be very deep; the second in *May*, after a little rain, which is not to be deep, and wherein half a Spades depth is enough only to kill the grass, and by a little stirring the surface of the ground, to hinder that the heat of the Sun and dryness do not too much crust and bind it; the third in *July*, after the same manner, and for the same reasons; and the fourth in *October*, and then you are to dive as deep into the

earth

earth as you can, as you may see in the 26th. Article of Standards. In case the earth shall put out grass in great abundance (as it oft falls out in that which is prepared after the manner required for Espalliers) you are then to take it away by giving it a little labour, which shall only, as it were, scratch the earth so oft as the grass shall begin to appear; for above all things you must take good heed, that the fat of the earth does not spread itself in unprofitable productions, that it may be wholly preserved for the nourishment of the Trees and their Fruits.

4. You are the second year to begin to bend your Trees well to their right posture, and to prune them in such sort, that no superfluous branches may remain, and that all those that are to be spared from the Knife be laid into good order.

5. Pallisado's are made three ways, either with Poles set Lattice-wise along by the Walls, or by fastning the branches

branches to the Wall with leather and nails, or by fixing Sheep-shancks in the Walls, and afterwards fastning the branches to them.

6. Of these the first way is the most antient, and the only one that was in use at first; which to make such as they ought to be, the Poles are to be tyed very fast together, and the openings of the Lattices no more than half a foot square at most, and there must be hooks in the Wall from four foot to four foot, and three inches out, of which there are to be three ranks in the height of ten or twelve foot, to sustain and suspend the Poles in the Air, so that none of them may enter into the earth, or at least very few; for thus they will continue much longer, which is a thing to be desired, not only for the saving of expence, but also because it is very hard to put new Poles or other pieces of wood into an Espallier, without the Trees running a hazard of being broken, or very much incommodated. You are to chuse

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your Poles for this purpose, of Chestnut, or of Elm, which also are to be pill'd, and without any Bark; and it would moreover be very good to lay them a long time in water before you use them, for Elm, especially, grows very hard after having been seasoned in water, and lasts much longer: you may also make use of Sallows, and all other sorts of wood, provided the Poles be very straight. Great laths of Oak painted green, and fastned with Wire, are likewise sometimes made use of in this kind of Work.

7. The second way, which is done with leathers and nails, is more proper, because it is not at all discerned when the Tree is again covered with his leaves; and moreover, one may by this means more easily place the branches exactly as he desires; but this cannot be made use of but upon Walls that are shot over with plaister, for as much as otherwise the nails cannot hold; and moreover, it costs thrice the time the others do, and therefore

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is by no means proper for those who have a great many Espalliers to order.

8. The third way, which is done with Sheep-shancks fastned in the Walls, is doubtless the best and most commodious of all, and that which is done with least charge; but the bones must be set so near together, as not to be above four or five inches from one another, to the end that they may every where be met with, where a branch is to be tyed, otherwise the Trees can never be laid in any tolerable order. These ought to be placed in the Wall, in the order of Quincunx, and set so far in withal, that they may not stand out above an inch, or very little more, which is sufficient to fasten a Branch to, with an Ozier, a Withy, a Bull-rush, or Spanish Broom; and it were to be wisht that they were placed in building the Walls, for they can never be so rightly placed, when they are already built. There are, who instead of these bones, make use of little

little sticks of Dog-tree, or heart of Oak; but the bones are much better, smother, and more commodious, and cost less than all the rest.

9. You are to raise the Trees you pallisado, after the Figure of an expanded hand, or of a Fan spread out to the utmost, so that the middle branch be always higher than the rest; and that ought never to be bowed, but to be stopt in its speed at the top, when it aspires too high, for fear, lest in drawing too much nourishment, the Tree should want it below, and not put out branches enough to furnish the sides; after which you must draw out, and spread the branches in such sort, that the extremities be always ty'd higher than the place where they part from the Tree; that is to say, you are never to bow them downward; for naturally all Trees tend upward, and shoot their branches that way, so that if you should force them to return towards the earth, that contrariety would exceedingly hurt them. You

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are also to take heed, that the middle of the branch be not bowed in such sort, that the two extremities be lowest, and by no means suffer the branches to cross, or be laid over one another, which is commonly seen in Espalliers that are not very carefully looked to; and in the mean time, it is impossible the Trees should prosper, when put into so incommodious a posture. The branch is therefore to be extended in a right line, from the Stem where it comes out, to its utmost extremity, still mounting a little upward, but very little; for if it were carried up too straight, the bottom of the Tree would be wholly disfurnisht, and dispoyled of its due ornament and proportion.

10. You must begin to pallisado the lower branches, within half a foot of the earth; and so continue them up to the top; and to the end that the Tree may furnish it self in the lower parts, and shoot forth branches on either side, you ought to stop the extremities of the

the Graft in pinching them with your nails, so soon as it shall be shot up two or three inches high, as shall be better explained, when we come to speak of Pepin-fruits.

11. Rightly to understand how to raise a Tree, you are necessarily to know how it is to be cut, and in that principally does consist the care that is to be taken about Espalliers. To which end you are to consult the 30th. Article of the Chapter of Standards; for although the pruning of those, and of Espalliers, are very different in many things, they have nevertheless some relation, and the Gardiner, who knows what Figure his Tree ought to bear, knows also very near, what branches ought to be taken away. In the first place, you are never to suffer any branch on the back-side of the Tree, that is to say, betwixt the Wall and it, nor on the fore-part neither, but on the two sides only. Secondly, you must take away, or stop all the branches that shoot out in length, without putting

out on the sides, and that are not sufficiently furnish'd with leaves, and little sprigs in their extention ; for otherwise it will fall out, that the middle of the Tree will be in a manner naked, and cannot recloath it self with leaves or fruit. Which Rule is to be observed for all sorts of Trees, but principally Peaches ; as to which, if this particular care be not taken, you will presently see neither fruit nor leaf, but at the extremities of the branches only.

12. The principal pruning of Trees ought to be in the decrease of the Moon in *January* and *February* ; and if the Trees be weak, you are always to stay till the decrease of *February*, lest the cold should pierce into the wounds after they are cut ; nay, it is oft-times better to stay till the decrease of *March* ; for the cutting of the Tree it imports not, though it were already in the blossom.

13. In this Season you are to take away all the superfluous branches that would deface the Figure of the Tree,
stop

stop the good that shoot out too far, and prune away all the ill wood which was of the *August*-shoot, that never bears fruit, and does only burthen and incommode the Tree, because it has not had heat to mature it, and (according to the Gardiners phrase) is not sufficiently Augusted. In a word, to speak properly, there is only this one Season for pruning, for as much as during the rest of the year, we never cut off any branches, but only stop and hinder them from shooting irregularly and to ill effect.

14. In pruning you are evermore to spare those Branches which are nearest to bearing, which after you have been a while used to Trees, will easily be distinguish'd from others. Those who covet to have long fruits, ought to consider the little branches which are short and well-liking, and full knotted with Blossoms, and that grow nearest to the Bole of the Tree, as fittest to gratifie their desire ; of which knots or buttons, they must also nip off so
F 3 many,

many, as to leave no more than one or two only, and also be careful that there still remain some knots for leaves over, and at the extremity of the little cut branches, to the end that they may make a little tuft of leaves to defend the fruit it is to bear, from the heat of the Sun, and also the branch from withering. This little cutting so made, will cause the sap which would otherwise have dispersed it self to the nourishment of a great many buttons, to bestow its vertue upon those only which remain: but you are yet to take notice, that as commonly there are several blossoms in every knot or button, so also there remain several Pears; wherefore to have them very large and fair, you are again to take away the greater number, and leave no more than one or two at most.

15. Notwithstanding, that you have pruned your Trees in the fore-named Season, you are nevertheless yet to take care to stop them in the decrease of *May* and *June* (for the decrease

crease of the Moon is evermore to be observed in this Work) which is to be done, to the end that the Tree may fork into several little branches and sprays, and to hinder it from disfiguring it self; which besides that, it preserves the ornament and beauty of a Tree, does also very much contribute to the liberal bearing thereof, for those little branches commonly are they which are most charged with fruit. Peaches and Apricots require to be often poll'd, even every decrease of the Moon during the Summer, and so long as the sap is in them, and that they shoot; for you are to have an especial care no more to touch the Trees before Winter when their sap is staid, or that they have not much remaining in them, for as much as they then can never again cover the wound they have received, but the injuries of the Season, and the Winters piercing cold would mortifie the part in such sort, that you will soon after be compelled to cut off the whole branch.

Pear-trees grafted upon wild stocks and not upon Quinces, require as frequent dressing, as either Apricots or Pears, otherwise they shoot all into wood, and bear no fruit at all.

16. The abundance which every one covets in all things, is exceedingly hurtful to Espalliers, for as much as it is naturally too usual and over-excessive in these kind of Trees, if good heed be not taken to prevent their over-bearing; wherefore, the Trees will neither long be preserved, nor fair and large fruit gathered from them, if care be not taken to take away a great number so soon as they are knotted, and before they have taken much nourishment from the Tree; and you are ever to leave some fewer than it is able to maintain, that it may not find itself oppressed, and may not disperse and waste its force in this production. This Rule ought chiefly to be observed for Trees that bear long fruits, as the Bonchrestien, and the Bergamot; but you are to make choice of the fruits you
take

take away, and of those you leave you are never to suffer any at the extremities of the branches, not so much as a blossom, for they never prosper in that part; and yet though they cannot arrive at their just greatness and perfection, they nevertheless totally drain the whole branch, and hinder it from thriving; you are therefore also to leave the fruit the nearest to the thick branches, and to the trunk of the Tree.

17. When you disburden a Tree from an over-abundance of fruit, you are not to tear them, or pull them off with your hand, by reason that in so doing you would lay open the branch in those parts where the stalks of the fruits are fastned, and so cause the sap to evaporate, which often makes the neighbouring fruits to wither, or at least hinders them from thriving to their just growth; but you are to cut the stalk as far off from the Tree as you can, which may be most commodiously done with a pair of sissers.

18. These

18. These observations principally serve for Pear-trees, nevertheless Peach-trees do also require to be discharged of part of their fruits, that the remainder may come to greater perfection, and that the Tree may longer endure.

19. You are never to spare dung, nor any of the other helps and improvements which are necessary for well enriching the Soyl wherein you intend to plant Fruit-trees, it being to be wisht that it were in such a condition at first, that it may stand in no more need of their help when the Trees come to bear, it being impossible but that the mixture of this strange body, must of necessity evermore give some ill relish to the fruits, or at least take away something from the good savour of the earth, and render them more wallowish and faint: but when the dung is well consumed, both by time, and by frequent labouring and stirring, it assumes it self the same quality of earth, leaving only its salt and fatness,

ness, so that the natural excellency of the fruit receives no manner of diminution; wherefore you are to have a great care to preserve this fatness, and not suffer it to be squandered away in unprofitable productions, that you may not afterward be obliged to renew your improvement. To which end you are never to sow good herbs, nor suffer ill ones to grow near your Trees, but are always to weed them up, that the earth may only labour for them, by which means it will not be necessary of a long time to supply them with any more dung, the earth being once well enricht, if it be not of it self so burning, as in a short time to consume all these improvements; for when you perceive that it no longer retains its vertue, that the fruits dwindle from their ordinary largeness, and that the Trees visibly languish from their usual vigour, it will then be necessary again to supply it with new helps.

20. When you perceive a Tree to languish, that the leaves turn yellowish,

ish, and no more retain their natural and usual verdure, it is good in the beginning of Winter, after having well stirred the earth, to lay Pigeons dung, two or three fingers thick upon the earth, and four foot compass about it, and so let it lye all Winter there to spread its force and too great heat, and afterward in labouring the Tree when the cold season is past, to turn it into the earth, which will restore it to its former vigour. It is also very good to apply a great quantity of Swines dung, but for that it is presently to be buried in the ground, and you are not to leave it on the top, for as much as it is not too hot, but on the contrary, the coldest of all other improvements. In turning up the earth, you will often find some parts of the root of the Tree diseased and decaying, which with the pruning-knife is neatly to be cut, to make it thrust out new fibers, and so to recover new strength, in which case you are to cover the root anew, with good fat soyl well consumed,

sumed, and old dung well mixt with mould, and take heed not too much to bare the root of the Tree, or lay it too open, lest intending to relieve, you totally destroy it.

Of Espalliers in the open Air, called Hay-d'appuy.

ALL that has been directed for the raising Espalliers against Walls, may also be indifferently observed in Espalliers in the open Air, for they require the same preparation of the earth, the same manner of planting, the same way of cutting, and the same extention of their branches. They have not indeed the advantage of the Wall the others have, which by repercussion very much augments the heat of the Sun, and by its shelter secures them from the violence of the winds; but if they are not so well skreen'd as the first, they are

are yet in much greater security than the Standards, and even than the Dwarf-trees and Shrubs, for as much as the Poles to which they are fastned, keep them firm from being shaken with the wind; for which reason, the large fruits they bear stand in greater security, than in other Trees; and moreover, this kind of Plantation being ordinarily set over against the Espalliers, which are planted against the Walls, to make an Alley betwixt them (and for that reason called a Contre-Espallier) they still in some measure participate of the advantages those enjoy which are planted by the Walls, and therefore delicate fruits succeed very well in this posture, the Bergamot excepted, and some of the tender Pavies, which constantly require to be planted against a Wall. This sort of Pallisado is not to be made but with Poles, and that after the manner set down in the sixth Article of Espalliers. In planting this sort of Trees, whether Stone, or Pepin-fruits,

the

the same distance is to be observed with Espalliers against Walls; and for what concerns Pear-trees, it is much better to plant those grafted upon Quinces, than any other.

Of Shrubs or Dwarf-Trees.

THIS sort of Trees costs much less than the two former, and yet the fruits nevertheless fail not to prosper very well, some of the more delicate and tender Trees only excepted.

Pear-trees succeed very easily this way, if grafted upon Quinces, and not otherwise, the others being hard to be made submit to this little stature, by reason they thrust out so much wood, and the more you cut them, the more they put out, and besides, naturally aspiring to be tall; they never bear fruit to purpose, if deprest and subdu'd to another Figure. They are to be prun'd in the same season with the Espalliers, their form ought to be

round,

round, you must take from them the branches that cross one another, not leave them too much wood ; take heed that the branches do not shade one another, and that they are not too thick, especially within of the Tree, which is evermore to be discharged of wood, forasmuch as it is useless in that part, and never bears any fruit. The Pear-trees of this sort ought to be planted at the distance of twelve, or at least ten foot from one another ; they may be planted in the Contre-Espalliers instead of Pallisado's, or you may make entire Plantations of them, being set in the Quincunx order, at the forenamed distance. Apricots are by no means to be planted after this manner, by reason that, besides, they will not have sufficient security from the winds, their Trees will not be subjected to this Figure. Peaches do better this way, and yet they extend themselves too far, and put out such abundance of wood, that it is much better to leave them to their natural liberty
in

in Climates where they can prosper in the open Air.

Cherries and Plumb-trees are very beautiful, and bear exceeding well in Dwarf-trees ; but you must then set them at six yards distance from one another, for as much as they stretch out their branches very far, and so far extend their heads, that they bow back again towards the earth, as if they were raised in tall Standards.

The Plumb-tree is much more patient of the knife, and suffers his superfluous wood to be taken from him, much more willingly than the Cherry, from which nevertheless it is also requisite to prune away a little in the middle of the Tree when it is too thick ; and to bring it into this Figure, you must stop the Grafts betimes, so soon as they have shot three or four inches, and make them turn down again towards the ground. The Cherry-tree will not be so often cut as the Plumb, and it is sufficient to take away his superfluous wood from the middle
G of

of the Tree only, when you perceive it to be too thick. Apple-trees do also very well in bushes, when grafted upon a stock of Paradise; but those which are grafted upon ordinary crab-stocks will be raised in Standards, and come to be great Trees; but those which are grafted upon the Paradise-stock, put out very little wood, and nevertheless bear plentifully well; these are to be planted at two yards, or at the most, at seven foot distance only from one another, if you will make the best use of your ground, for they require no greater extent than that little space will allow; they will hardly endure to be cut at all, neither do they need, for as much as they put forth no more wood than is necessary for their bearing.

As to all the rest, that is to say, for what concerns planting, labouring and cultivating Dwarf-trees, you are to observe the same Rules, or very near, that you do for your Espalliers.

of

Of Composts.

OVer and above the foregoing Observations, in the Chapters for the Manuring of Trees, and for distinguishing the Soyls wherein they are planted, it will not be amiss to observe something in general touching the nature of Composts in their different qualities.

Cow-dung then well rotten, is of all others the best for Trees, both because it continues longer than any other, and also by reason that it is not too hot; and therefore is to be turned into the earth in labouring the ground at the beginning of Winter.

Sheeps-dung is hotter, and therefore not so proper for dry and burning Soyls, if not first very well consum'd, but then may be turned into the ground at the same Season.

Horse-dung is yet hotter than the other, and not very proper for any

but moist places, and in such Soyls it is of all other the best; 'tis true, that when it is very well wasted and decayed, it may be used in all places, and put to all uses; but, generally speaking, it is much more proper for pot-herbs and for Pulses, that is, all sorts of Pease and Beans, than for Trees; and is best to be laid upon the earth in the beginning of Winter, that the rains and frosts may perish it, and make it lose its too great heat; after which, when you give your Trees the first Husbandry in the Spring, you may turn it in.

Swines-dung is of all other the coolest, and consequently very proper for Trees, especially in a burning Soyl. It ought ever to be turned in at first, and not to be laid upon the earth, and not being too hot, may as well be made use of in the Spring, as the beginning of Winter.

Pigeon-dung is the most violent and hot of all, but its ardour being once extinct, does wonders in reviving the vigour

gour of a Tree, & helping it to put forth large and well-coloured leaves; but it is never to be turned into the earth, till first it has been long exposed to the frost and rain; and to do well, you should always spread it upon the earth in the beginning of Winter, and not turn it in till the Spring; but as its effect is prompt and sudden, so its virtue is but of short duration; for no dung whatever so soon spends it self in the earth as this; and when you have used it with all the Art you can, in a year or two the Soyl will be as poor as before, and receive no manner of advantage by it.

Of Creatures that infest Trees and Fruits, as also sundry accidents that are hurtful to them.

1. **I**T is not enough to set a Tree in a good place, and to husband and cultivate it well when it is planted;

but you must also preserve it from several accidents to which it is subject, and defend it from a thousand little enemies that attack it. Caterpillars, Locusts, Cantarides, Ants, and a number of other sorts of little animals, denounce open War against your Trees, with innumerable armes without, and Moles, field-mice, & certain litle white worms that eat the roots, persecute them within the earth. Nay, there are certain little worms that breed in the very substance of the very Tree it self, and in the most vital part of it, which is betwixt the wood and the bark, which cause the branches to wither, and by little and little, if not lookt unto, will totally destroy it. The Rats and the Wasps will also make profit of their Spoyls, and in a short space devour and corrupt the fruits for which the Gardiner has laboured the whole year about. Take here then the remedies which are to be used against all these different sorts of Vermine.

2. As to Caterpillars, you are to have

have an especial care during the winter season, to take away all the Kells, or web-like receptacles that hang upon the Trees, wherein the seed of this pernicious vermine is concealed; in doing of which, it will not be enough to cleanse the fruit-trees only, and those that chiefly require the Gardiners most particular care; but you are moreover to cut all the hedges, and the branches of the other Trees that grow within three or four hundred yards round about, the vicinity whereof would otherwise infallibly within a little space, infect your more pretious plants with this fatal pestilence, so soon as the vermine should come to disclose. You are also to take care to burn all those Kells, it being not sufficient to cleanse them from the Trees, and still to leave them upon the ground, where they would breed as well as upon the Trees themselves. Of these there is a certain sort, that breed in little rings, which wrap themselves about the smaller branches of the

Trees, and are by so much the harder to take away, by how much they are almost invisible till they are disclosed, and then it is that you are to dispatch them as well as the others, that are immediately engendred by the impression of the Air, when the evening and morning cold makes them to knit and crowd together. To remedy which, 'tis said, that if you bind a Tree with green Rye, or tye the branches of Elder or Dane-wort amongst those of the Tree, the Caterpillars will not come near it. Some also sprinkle the branches and leaves of the Tree with water, wherein salt-peter has been infused, or the juice of bruised Rue to kill this sort of Vermine.

3. Touching Locusts, if you have not the patience to wait for the first great rain that shall fall, you need do no more but shake the Trees only to which they cling, to make them fall off, and you may then crush them to pieces.

4. Cantharides may be destroyed
after

after the same manner, or otherwise by sprinkling the Trees with water, wherein Sage or Rue have been boyled, after it is cold, which will kill them. 'Tis also said, that Rose-trees secure their neighbours from this sort of Vermine, and that they will never come into a Pallisado where they are planted.

5. As for Ants, saw-dust powdered and strewed about the Tree they spoil by their frequentation, totally hinders their access, by reason that these little Creatures dare not pass over the powder they feel stir under them. Also a pretty broad circle of pit-coal ashes drawn round the Tree, does the same thing, by reason they can have no footing, by which to come to climb the Tree so fenced about; a circumference of Glue or Bird-lime, does also keep them off.

6. For what concerns Moles and field-mice, the Gardiner must be careful to take them with certain traps made for that purpose. 'Tis also said,
that

that a certain Simple called *Horti palma*, has the property to chase away the Moles from all places where it is planted.

7. The branches of Ground-Elder fresh gathered, and mixt with those of the Tree, also hinder Rats from coming near them.

Of Nurseries.

1. Such as are curious in planting,ought betimes to take care to raise great and spacious Nurseries of all sorts of fruits, for as much as one is much more assured of the vigour of Trees, and the rightness of the sorts he desires, when he has them of his own raising, than when he is constrained to look out for them in other places; and besides, it is much better to be in a condition to supply others who stand in need, than to be obliged to buy for ones own use.

2. Nurseries seem to be chiefly proper

per for Pepin-fruits, from whence the word *Pepiniere*, a *Nursery*, derives it self; nevertheless, under this denomination is comprehended all sorts of Plantations of young Trees, after what manner soever raised, to be transplanted afterwards into other places.

3. To make a good Nursery of Apple-trees and Pear-trees, you are to make choice of a light and easie Soyl, to the end that the roots may with greater facility penetrate into it, and put out a great number of hairy fibers. You are then to make little rigots or trenches of a Spades graft only, and three foot distance from one another, and there in *November*, and a fair Season, plant your little Pear, and Apple plants, which you are to chuse well of the most kindly and hopeful shoots, and of no more than one, or two years growth at most, and plant them at seven or eight inches distance from one another in the Trenches, and take heed withal not to set them deeper in the earth, than they were before in the place

place from whence they were drawn, to cut off half of the roots in planting them, and not to meddle with the tops till after Winter; and after you have well supplied the roots with small and light mould, and filled up the trenches, you are to bank them up handsomly with earth in their rows or ranks, so that the Plant be scarcely seen; and after Winter is past, when they begin to put out in *April*, you must cleanse them with your fingers, so as to leave no more than one Burgeon, or upright shoot only.

4. About three weeks before *Midsummer*, when Fearn is yet tender, it is very good to lay it green and fresh got about the ranks or rows, at the same time you have laboured them, to preserve the freshness of the earth, and to hinder the heat of the Sun from incommodating those little Trees, that have not yet strength to defend themselves; but then in the labour you bestow upon them, you must be careful not to touch the roots; it will

will therefore be sufficient to stir the earth half a Spades graft near unto the rows, provided you give them in the middle their due and usual depth. When Winter shall be come, you should bury this Fearn in the middle of the Trenches or Gutters, to the end it there may rot and bare the Trees, by taking away part of the earth by which they had been shouldered and moulded up; yet so, nevertheless, that there still remain something above the ordinary level of the Plot, to defend the Trees from the frosts of the Season.

5. You must the Spring following take the first fair weather in *March* to labour this Nursery, and in labouring it, the Gardiner is with his Spade to chop and mince the Fearn that was buried in the beginning of Winter, and that will then be half rotten; with which, mixt with earth, he shall again bank up the Trees after the same manner he did with simple earth at the planting of them, and is to continue so

so to do three or four years successively, till the Trees shall be grown of sufficient strength to be grafted.

6. As the Plant increases in growth, you are still to cleanse it from all the little branches it shoots forth for half a foot above the earth, to keep that part clean, where the graft is to be placed; but you are to cut nothing higher than that, nor by any means the stock, that being to no purpose at all, for as much as it imports not after what manner the wood grows that is to be cut off, when the Tree shall come to be grafted; and it would mightily hinder its growth, by reason that the sap evaporates by the wounds you make in cutting the little branches, and the substance of the Trees as yet but small and weak, instead of preserving and fortifying it self, waists and consumes away to nothing.

7. If your Pepin-stocks are planted in a good Soyl, and husbanded after this manner, they will in the fourth year be ready to be grafted, and then
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you must observe to put but one graft upon a stock, how thick soever it may be; which graft ought also to be proportioned to the thickness of the stock, and be chosen bigger or less, according to the strength of the other.

8. You are to cut the stocks you graft upon in the form of a Hinds-foot, for as much as after this sort the Tree is more apt to bark over again, and does much sooner cover the wound.

9. You are ever to observe to place the backside of the cut towards the South, that the Sun may not dart plum down upon it, and cause it to rift or chop; for which reason also you are to take good heed, that the clay you put upon it be so well tempered, as not to crack off, and leave the part where it is grafted open, and naked. A Maxim which is also to be observed in all sorts of Trees whatever that you cut.

10. The graff in cleft being the best and the most usual for Standards, we
do

do not commonly think of any other for these sort of Nurseries; not that inoculating is not very good, especially for Pear-trees, but it is more proper for Stone-fruits and Quinces, than for Apples and Pears upon Pepin-stocks; and Apple-trees come on very slowly when grafted after this manner.

11. There is hardly any Season in the year wherein you may not graft; for all Summer long, and in Autumn you may inoculate, and in Winter you may graft after the ordinary way; nevertheless, the best and most certain Season for this sort of grafting is in *March*, and then in the decrease of the Moon: but for gathering your grafts, you may indifferently do it, either in the wain, or the increase.

12. You are ever to cull your grafts from well-liking Trees, and that are in their year of bearing; that is to say, that are well knotted with blossoms; for the Tree you graft will evermore retain the estate and condition in which

which the Tree was, from which he derives his graft, at the time it was taken from it, and will commonly bear exceedingly well, if the Tree (which imparts its whole nature to it) was then well set with fruit; as on the contrary, it will remain barren, and very rarely bear any fruit, if the Mother-Tree was then in her year of repose.

13. When the graft begins to put out, you are to clean it with your fingers, so that only one sprout remain, to the end it may not fork, and that the entire vigour of the Tree may go to maintain the branch you would preserve; but after that, you are no more either to cleanse, or cut any thing from the Tree, what branches or sprouts soever it may put out, till the third year, and then you are not only to take away the unprofitable ones, but moreover, form the Tree into the Figure wherein it ought to be, which is chiefly to be understood for Trees that you raise in Standards.

14. In your Nurseries your Apple-
H trees

trees ought to be separated from your Pear-trees, and to observe an exact *decorum* indeed; your different fruits ought to be distinguished by the several ranks or ranges of Trees. In the following Chapter, I intend to speak of the several sorts of fruits, together with the manner of chusing and disposing of them.

15. You may also graft after the same manner, observing the same rules, Apples of all sorts, upon little Apples of Paradise for Dwarf-trees, which prosper exceeding well, and prove very great bearers; but as this sort of stock shoots out but very little wood, if those you shall plant in your Nurseries be of any thickness, you are not to meddle with pruning the root, and are to preserve half a foot, or thereabout, of the Bole, to the end, that when it shall sprout, you may place the graft upon the old stock; for if you should be obliged to expect till the new wood it shall put out be of sufficient thickness to bear a graft, it would too
much

much stretch your patience, and defer your Plantation too long. You are also to be careful not to graft too low, lest the Tree (which Apple-trees are very subject to) should take root above the graft, which, should it so fall out, it would no more be a Dwarf-tree, but would assume the nature and form of an ordinary Apple.

16. All the same Rules are also to be observed for Apricots, Plumbs, Peaches and Cherry-Trees, when you graft them in cleft to raise tall Trees, excepting that you are to take notice to graft them sooner, and in the decrease of the Moon in *January* or *February*. It is very true, that most of the forenamed fruits (especially Peaches) delight more in inoculation; but in case you purpose to extend them into Espalliers, or to plant them in Shrubs, you are then to observe the Rules already prescribed for Pear-trees designed for those Figures.

17. Grafting or inoculating in Escutcheon, is proper for all Stone-fruits,
H 2 but

but in truth, less for the Cherry, than any other, by reason that they usually spew out much Gum from the part which is opened to receive the shield, which very often suffocates the eye or bud, from putting out in the Spring; for which reason it is much better to inoculate Cherries in the decrease of *May* or *June*, for as much as the Escutcheon put in at those Seasons, immediately sprouts upon the inoculation. You may also make use of this way of grafting for other fruits, but not with so certain success; and in so doing, you are always to cut the stock at the same time you inoculate. Such as chuse to graft after this manner, are evermore to take heed never to place two grafts over against one another, on both sides the Tree, by reason that one cannot afterwards conveniently come to cut away the superfluous part of the stock, when the grafts have taken and made their shoots, so that there would still remain a part of the old wood betwixt them; wherefore you are always

ways to place the grafts in such sort, that the one be always higher, and the other lower.

18. When you have inoculated a Tree, you are not by any means to cut away any thing of the stock above, till the Winter be past, and when in the Spring the eye of the graft shall begin to sprout, you are then to cut off the stock two or three inches above, but no nearer, for fear of killing the graft, for want of sap to nourish it; and the following year, when the graft shall have well retaken, you may cut away the stock close by the shield.

19. Inoculation is evermore to be performed, or in the decrease of *July*, or sometimes in *June*, if it be pretty well advanc'd into the following Month of *July*; for you are always to inoculate at these times, or else in the end of *July*, or in the beginning of *August*.

20. If you shall perceive that the eye of the Escutcheon will put out before Winter, you may check it by

H 3 early

early slackning the ligature of the Escutcheon or shield.

21. For ligament, Cotton, or Woollen thread is much better than that of Hemp or Flax, both by reason it doth not press so hard upon, nor so eat into the bark, and that it stretches and gives way as the branch swells and encreases.

22. Cherry-trees grafted in cleft prosper exceedingly well, as also in Escutcheon, if inoculated at *Midsummer* upon the red Merisier; for the Black-cherry is not so well stored with sap, and they prosper better after this manner, than if planted upon old rooted stocks, especially if you would raise them in Standards, which has also the same effect in Bigarotiers and Griotiers; only when you design them for Dwarf-trees, you are to take notice to graft them very low, and to check the graft so soon as ever it shall begin to put out, to the end that it may spread into branches, and the Tree may form his head from below.

23. Apri-

23. Apricots are usually grafted upon stocks of their own kind, raised from the Stone, as also upon Plumbs, Peaches and Almonds, and prosper well upon them all. 'Tis said, that they will also take upon the Mulberry, and that they are not subject to frost being so grafted, that sort of Tree being naturally exceeding slow, and not enclined to put out till after the frosty Season; but it is hard to believe that two so different saps can ever agree and mix together, and several who have tryed the experiment have lost their labour.

24. The Peach desires to be grafted upon a Plumb, a Peach raised from the Stone, an Almond, or an Apricot, and chiefly delights in Inoculation. You may also raise very good Peaches from the Stone, and there are certain sorts, as the Peaches of *Pau*, and several others that succeed every whit as well, and bear as good fruit from the stone as by grafting. Those grafted upon a Plumb, prosper marvellously well; but

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the

the root of the Plumb-stock is a very ill neighbour, both by reason that it devours too much ground, and also shoots forth suckers on every side; but Trees so grafted, continue longer than on a Peach. As to those that are inoculated upon an Almond, they continue also very long, and in a sandy Soil are much better than any other; but they very unwillingly retake when transplanted: for which reason it is much better to sow the Almonds in the stations themselves you design for the constant standing of your fruit, and afterwards to graft them upon the place, then to sow them in Nurseries for future transplantation. Such as are grafted upon other Peaches, do yet bear longer and better fruit than any other, because being of the same nature, they more easily unite, and better agree together; but they are much shorter liv'd than any of the rest. The Apricot stock is also very proper for a Peach, especially for early Peaches; and yet they are sometimes subject to

spue

spue out Gum, as well as the Cherry, when inoculated, though that does but rarely fall out.

25. Plumbs are ordinarily grafted upon stocks of their own, unless you design to plant them near other Trees; and then to avoid the inconvenience of their putting out too many suckers from their roots, you may graft them upon Apricots or Almonds raised from the Stone.

26. Apricots are grafted, either upon other Apricots raised from the Stone, or upon Plumbs, and sometimes even upon Peaches and Almonds.

27. You must note, that your black Damson-Plumb, and that of *St. Julian*, are incomparably better than all others to graft upon, and such as are curious in their Plantations, will never store their Nurseries with any other, where those two sorts are to be had.

28. The distances before set down for Plants in Nurseries, are proper for those Trees you design for Standards, and for such as you intend for Espaliers

liers

liers and Dwarf-Trees, the same distance betwixt the rows and ranks may be indifferently observed; but in the order of the ranks themselves this difference is to be noted, that the latter must always be planted at two foot distance the one from the other, whereas for those you design for Standards, six or eight inches will suffice. The reason of which is, that you are sometimes, and at first, to extend the Trees you intend for Shrubs and Espalliers, into their destined Figure, whereas, if they were crowded and shouldered in the Nursery, they would shoot upward, instead of spreading into the other form. A Rule, that may indifferently serve for both Stone and Pepin-fruits, according to the office for which they are designed.

29. Pear-trees destined for Espalliers or Bushes, are ordinarily grafted, either upon Wildings raised from the Pepin, or upon Quinces; as to the first of which, you may indifferently either graft or inoculate; but for the Quinces,

Quinces, they prosper infinitely better being inoculated; and being grafted in cleft, do very hardly recover.

30. Quince-stocks are much more proper for all sorts of Dwarf-pears and Espalliers, than the Wildings, by reason that they naturally encline to that Figure, whereas the other are evermore aspiring, and must be eternally cut and flisht, to subdue and correct them; and experience has made it plain, that Pears grafted upon Quinces, bear much more and fairer fruit, and are more easily perswaded into the Figure for which they were designed, than the others, which are apt to spend themselves into wood. It is true, that at the first bearing, the fruit that comes from the Quince-stock, does often retain a smack of its kind, especially in a stiff sturdy Soyl; but that is soon gone, and the two or three first years to carry it off, that there afterwards remains no difference in the taste. The following Chapter shall set down some sorts of fruits, that will succeed well in

in this Figure, being grafted on the Wilding; but of those there are very few: In the mean time, you are only in this place to observe, that in a light Soil, you are to make use of no other Trees for Shrubs and Espalliers, but such as are grafted upon Quinces only, in stiff and sandy situations; I confess those raised from the Wilding do sometimes better succeed.

31. There is a vast difference betwixt the Apple-Quince and the Pear-Quince, of which the first has a greyer bark enclining to white, more smooth and sleek, his branches thicker and more forked, the leaves not so large, and the fruit less, and more full of core. The Pear-Quince shoots out his branches more straight, has a blacker bark, and downy withal, the leaves much larger, and the fruit fairer, and not so full of core. And this is it you are to chuse to graft upon, for the Tree will ever retain all the good qualities of the stock, will put out a much finer head, and will bear a much better fruit; whereas

whereas on the contrary, the Apple-Quince stock, not being able to keep pace with the graft you put into it, when the Tree arrives at its stature, and has formed his head, it will appear that the foot, which is the stock, does by no means answer to the growth above, but leaves a deformed tumor in the part where the graft and stock are united; which not only disgraces the beauty of the Tree, but moreover gives us to understand, that the stock is not able sufficiently to nourish the parts above. There is of late found out a sort of Pear-Quince, called the *Portugal-Quince* (I believe for being brought from thence) that bears an exceeding broad leaf, and is by much the best of all others.

32. When you plant Pear-Quinces in Nurseries, or in the place where you design to graft them, you are to cut them within an inch of the earth, that they put a new Bole from the foot, by reason that it is upon that new shoot, that you are to inoculate; which also

also you are to observe in the planting of such Plumb-stocks in your Nurseries, as you intend to inoculate.

33. The same Tree may be several times inoculated, and it is convenient to have very large fruits for that purpose, and to graft them of several kinds. As for example, to inoculate Pound-pears, or Summer Bonchrestiens upon the Quince-stock, and afterwards to reinoculate the Winter Bonchrestien, and the Bergamot. You are especially to have evermore in your Nurseries a great many stocks of Pear-Quinces grafted with the forenamed large fruits, or with those *de valée*, of which sort the sap is excellent to entertain and nourish all sorts of grafts; by which means you may graft upon the branches of those Trees in cleft, grafts that are sometimes brought from very remote places, and have been long in coming, and even from parts so distant, as Escutcheons are not to be brought in Summer, neither indeed does the Quince prosper very well grafted in cleft. We

We have only here made mention of three ways of grafting, to wit, in cleft, in Escutcheon (which latter is to be performed in the decreases of *May* and *June*) and in *Oeil dormant*; not that there are not yet several other ways of grafting, which may also be made use of with very good success; but these, as being the principal, shall suffice. Many are of opinion, that it is not good to plant Nurseries in a fruitful Soyl; for which, the reason they give is, that the Trees being drawn out of such a Soyl, and not finding elsewhere so good entertainment, cannot prosper, having been used to a better diet, and on the contrary, thrive and come on to a miracle, if transplanted from a lean and hungry Soyl, to a better and more fruitful. Nevertheless, experience makes us see and know, that Trees raised in a bountiful Soyl, and particularly in a light mould, are much better to transplant into any Soyl whatever, than the other; of which the reason

reason is also most evident, for as much as those Trees have manifestly evermore fairer Roots, and more hairy Fibers; and moreover, a more generous sap, and more force in a good Soyl, which gives them a great deal more vigour in any place to which they shall be removed, than the other; which being taken out of an ill Soyl, have never good Root, and are always languishing and sickly.

Now let me tell you, that in order to great and continual planting, it is not sufficient to have Nurseries only, but you must have Nurseries of Nurseries, that is to say, you are to have sufficient out of your own stock, wherewith continually to furnish and supply your Nurseries. To which purpose you are to sow Apple and Pear-Pepins (but separately, that they may not be promiscuously confounded together) in a Plot, or Plots well prepared to that effect; to do which, you need only to strew the pulse of Cider or Perry upon the earth digged and made ready for it,

it, and afterward rake it in, as Gardeners do their ordinary Garden-seeds, and a year or two after you may draw them thence, and plant them in your Nurseries. As for Peaches and Apricots, they are always raised from the stone, and Plumbs are to be taken of the suckers which shoot out from the roots of black Damsons, or the *St. Julian* Plumb. And for what concerns Quince-stocks, you are to raise great ones to no other end, but to shoot forth suckers, which is done by cutting them close by the ground, and nipping off the branches they put out from the top every year, by which means those that shoot from within the earth, or layers covered with it, will take root enough to be transplanted the year following, into any place for which they shall be designed. Plumbs of Paradise are also raised after the same manner.

Of the different kinds of Fruits, and after what manner they best prosper.

THere are some who are of opinion, that all the fruits that were not known a hundred years ago are not worth planting, and good for nothing; and on the contrary, some others, who are curious to have of all sorts indifferently good and bad, and think they excel all other Planters, when they have got into their Plantations a great number of uncouth names, and such as peradventure were by most others never heard of before: But both these extreams are equally to be avoided, for as much as it is most certain we are in this age acquainted with a great many excellent fruits, that were either totally unknown, or utterly neglected by our Fore-fathers; as also, because they who are over-curious to have of all sorts, do unprofitably fill up

up good and choice places with many bad Trees, which would be much better bestowed upon those that are good. It will therefore be convenient to take notice of such as are the best, & best deserving the Gardiners pains and care, whether stone Pepin-fruits, and accordingly to furnish our selves with such, from which most pleasure and profit are reasonably to be expected.

Of the different kinds of Stone-Fruits.

ANd first, concerning Cherries, there is no great Observation to be made, by reason there are not many kinds of them, and those to every one sufficiently known. Of which there are principally these five sorts.

Cerises precoces, or the early May-Cherry.

Cerises Hatifs, the early Hasting-Cherry.

Cerises a feuille de sauge, which I take to be the Duke-Cherry.

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Grosses

Grosses Cerises a court queue, perhaps our Carnation-Cherry.

Cerises tardifs a longue queue, the Cluster-Cherry.

Of these the *Precoces* seem to be but of late years taken notice of, or at least in request, and not considerable for any thing, if not for being ripe the soonest of all other fruits; which yet, to make more early, are to be grafted upon the Hasting-Cherry-stock, and planted to the utmost benefit of the Sun, in Espalliers against a Wall, to the end that the extraordinary heat may yet advance their maturity.

The Guigne, or *Guscon-Cherry*, the Bigarreau, or *motley-Cherry*, and the Griote, or *Crab-Cherry*, are of the same nature with the other Cherries, and therefore merit no particular Observation, if not that Cherries and Griotes are very proper for Shrubs and Dwarf-Trees, as we have already observed in the Chapter of Shrubs and Bushes; but the Bigarreaux and the Guignes, do not prosper so well that way, by reason

reason the Trees run too much into wood, and therefore would be raised in Standards. Of Guignes there are three sorts, white, red, and black, which are called *Hearts*; but of Bigarreaux and Griotes, we know but one kind of each only.

Of Apricots we know no more than two or three sorts, namely the little Musk Apricot, another whose Almond or kernel is sweet, and the ordinary Apricot; all which require a very great shelter and security from the weather, and are more proper for Espalliers, than either Dwarf-trees or Standards. There are many more different kinds and sorts of Plumbs, than of Cherries and Apricots, of which these are the chief.

Petit Damas noir de Tours, the little black Damson.

Gros Damas noir, the great black Damson.

Petit Damas blanc, the little white Damson.

Gros Damas blanc, the great white Damson.

Damas gris musque.

Damas violet ordinaire, the violet Plumb.

Gros Damas violet.

Damas verd.

Damas gris violet.

Damas gris blanc.

Perdrigon blanc.

Perdrigon violet.

Brignoles violettes.

Grosse Imperiale, the great Imperial Plumb.

Imperiale Tardive.

De Gaillon.

d'Attilles de Gouvar.

d'Attilles du Mans.

Prunes de Naples, autrement

Damas gris de Caiban.

All which sorts of Plumbs are exceeding good to eat raw, and these that follow, proper for Prunella's and sweet-meats.

Moyens de Bourgogne, an excellent preserving Plumb.

Mir-

Mirabelle, sainte Catherine.

Diaprée de la Roche Courbon.

Prunes d'Apricot, de Tours.

Mirabons transparents.

Montmirot, d'Attille jaane.

l'Isle verd.

All these Plumbs prosper very well, both in Dwarf-Trees and Standards. But the Perdrigon is by much the most delicate of them all, and therefore deserves to be planted in a good Sun in Espalliers.

Of Peaches.

PEACHES deserve to be husbanded with the greatest industry and care, as well out of respect to their beauty, which surpasses that of all other fruits, as also to their natural delicacy and tenderness.

These are commonly distinguished into Pavies, that do not part from the stone, and are the males; and Peaches

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which

which do cleave from the stone, and are the females. I am of opinion that there is no male, that is to say, no Pavie, who has not his female, that is to say, a Peach of the same sort; nor on the contrary, no Peach that has not his Pavie; for we know and distinguish both the one and the other in most of the different kinds we have, which makes me conclude, that it is the same in all the rest, which we are not yet acquainted with, or at least but with the one or the other of them; Nature having doubtless alike coupled all these sorts of Fruits. The principal Peaches and Pavies that we know, following their order and nature, are these:

Avant Pesche blanche, Pavie, ripe at the end of *June*.

* Monsieur, * *Avant Pesche d'Italie*, that Ferrant. parts from the stone immediately after.

Pesche de Troix, blanche, that parts from the stone at the same time.

Pesche de Troix, jaune, fort musquée, parts

parts at the same time.

* *Pesche de Troix double*, parts from the stone also, and both of them at the same time with the white.

Alberge, which is the Pavie to the Peach of *Troix*, is ripe immediately after, and does not part from the stone.

Pesche Magdeleine, parts from the stone, and is ready in the end of *July*, or the beginning of *August*.

Pesche blanche batifue, ready immediately after.

Pavie blanc batif, which is the male to the one or the other of these two last kinds.

Pesche Cerize, or the Cherry-Peach, parts from the stone, and is ripe at mid-*August*.

Pesche violette licée, parts from the stone at the same time.

Brignon violet, ou musqué.

Pavie, male to the Violet-Peach, immediately after.

* *Brignon jaun*, Pavie at the same time, * Monsieur le Petit Mareil.

Pesche

Pesche Royale, or the Peach-Royal, parts from the stone, and is exceeding red at the same time.

Grosses Roussanes, Pavies ready at the same time.

Petites Roussanes, extreamly muskt, Pavies ready at the same time.

(b) Monsieur Martin. (b) *Gros Pavies jaunes & rouges*, at the same time.

Persiques, part from the stone, and are ready in the beginning of September.

(c) Monsieur de Lamegnon. (c) *Peschés de Pau, ou Persiques ronds*, at the same time.

Grosses Pesches jaunes, or the great yellow Peach, part from the stone in the middle of September.

Peschés Bourdes.

Peschés Abrigotines, or the Apricot-Peach.

Peschés Ollieres.

Peschés de Corbiel, part from the stone, and are good at the same time.

(d) Monsieur Montrecot. (d) *Peschés blanches, & vermeilles*.

Peschés de Narbonne, & Pesches admirables,

bles, an excessive great fruit, part from the stone at the end of September.

(e) *Pavie admirable*, which (e) Monsieur de Choisin. is the male to the two

former, a very large and coloured fruit, *en cul de lampe*, in the beginning of October.

Pesche violette tardifue, ready at the same time.

Pavie de Chinon, an exceeding large fruit.

Brignon violette tardifue, at the same time.

Millecotons vermeils, red within about the stone, excellent Pavies ready in the beginning of October.

Pesche blanche & rouge, an excellent fruit also in October.

Pavies blancs tardifs, in the middle of October, there are several kinds that are ready about the same time, which are hard to distinguish, of which some are earlier, others later.

Pesche

Pesche tout blanche, that parts from the stone, and comes at the end of *October*.

* *Au Val saint Germain.* * *Pesche beste-rave*, gray, and downy, and sanguine within, parts from the stone at the end of *October*.

Brignon Beste-rave, a *Pavie* of the same sort, excepting that it has a smooth skin.

Brignon tout noir, a *Pavie* ready at the end of *October*.

You are to take notice, that Peaches which part from the stone, do sooner and more easily ripen, and are more hardly to endure the frost and nipping air, than the others. And amongst them none so strong as the *Persiques* and *Pau-Peaches*; for which reason, you would do well to raise a great many of these two kinds in Standards in the open Air (but withal, in as much security from the winds as is possible in such a posture) for they have a much better taste, and are much a finer fruit from the

the Standard, than the *Espallier*. But all the other sorts are much more proper for *Espalliers* and *Contre-Espalliers*, than for any other Figure.

Of Apple-Trees.

A Pple-Trees are to be raised in Standards in the open Air, by reason it is the strongest and most hardly of all other Fruit-trees; but if you have a fancy to raise them in Dwarf-trees, you are then to graft them upon an Apple of Paradise, and by that means they will be very proper to plant against Walls, or in such other places as have not Sun enough to ripen other fruits. And of these it will be sufficient to have the best kinds only; for being a fruit that keeps long, one should not be so covetous of many several kinds, as curious of those that are good; which are,

Passe Pomme blanche batifue, ripe in the

the beginning of *August*.
Passe pomme Cotellée.
Calville d'Esté, Rambour blanc.
Rambour rouge, Cousinette.
Pomme de violette.
Pomme de neige.
Calleville blanc.
Calleville rouge.
Pomme d'Apiet.
Renette blanche.
Meilleur Renette rousse.
Renette toute grize.
Petit Courpendu gris.
Courpendu vermeil.
Gros Courpendu Bedeau.
Francatu.
Pomme-Poire.
Chataigner.

of

Of Pears.

There are of Pears more different sorts, that deserve to be cultivated, than of any other fruit ; which that you may the better know, I shall distinguish them according to the seasons of their maturity by the Months, beginning with that of *June*, at which time the earliest Pears begin to be ripe, acquainting you withal, on what sort of Tree, and in what situation every of them does best succeed ; as also, which are good to eat raw, and which to bake. Wherein you may by the way observe, that all Pears, especially Winter-pears, which are good raw, are also excellent to bake.

JUNE.

Petit Muscat, in the open Air, grafted either upon a Wilding or a Quince, prosper very well in Dwarf-trees, provided

vided they be well sheltered from the weather; but marvellous well in Standards in the open Air.

Petit Certeau d'Esté, either in Dwarf-tree or Espallier.

Janet, the same.

Pucelle, or *Palme*, in all Figures.

JULY.

Gros Muscat ordinaire, prosper well in the open Air, either upon a Wilding or Quince.

Muscat a longue queue, the same.

Muzette, the same.

Gros Muscat, or *Belissime*, the same.

Muscat Robert, the same.

Cuisse Madame, the same, and some of them in Espallier not to fail.

Rouffelet hatif, the same, and some in Espallier.

AUGUST.

Orange Commune, in all Figures.

Orange Musquée, in all Figures.

Amiral commun, the same.

Amiral

Amiral musquée, the same.

Petite Blanquette, the same.

Grosse Blanquette, or *Poire de Perle*, or *Cornicapre*, the same.

Oignonnet, the same.

Poire de Prince, the same.

Poire Royale, the same.

Poire au deux testes, the same.

Poire raze, the same, but better in Espallier, or dwarf-Tree, by reason that having a long and slender stalk they are apt to fall.

Fin, or *hatif*, prospers well in all Figures.

Poire Carmesine, the same.

Friole, prospers well in all Figures.

Mouille-bouche d'Esté, the same.

Bon-Chrestien d'Esté, the same.

Franco-Sureau, or *Poire de Papes*, the same.

SEPTEMBER.

Rouffelet ordinaire, prospers well in all Figures.

Gros Rouffelet de Rheims, the same.

Fargobelle, the same.

Caillau Razart, prospers best in Standard,

dard, and grafted upon a Quince, has a kind of unpleasant tartness.

Parfum, prospers well in all Figures.

Poire sans Pepins, the same.

Poire de Sain, the same.

OCTOBER.

Beur  rouge, prospers well in all Figures.

Beur  blanc, the same.

Mouille-bouche d'Automne, or *Jonguet*, the same.

Rozar d'Ingrande, succeeds best in Dwarf-trees or Espalliers.

Bergamotte d'Est , Summer Bergamot, in Espalliers only.

* A Chilly, chez Mon-

* *Oignon Rozar*, otherwise called *Brutte-bonne*, in Dwarf-trees or Espalliers.

Poire d'Angleterre, succeeds well in all Figures.

Poire d'Ambre-gris, succeeds best in Dwarf-trees, or Espalliers.

Poire

Poire de vigne, prospers well in all Figures.

Petit Oing gris, the same.

Chat Brull , the same.

NOVEMBER.

Messire Jean ordinaire, succeeds well in all Figures.

Messire Jean blanc, the same.

* *Bezidbery*, the same.

* Ruel.

Damadote, the same.

Grosse que   d'Hyver, the same.

Bergamotte ordinaire, is to be planted in Espalliers only, * but then to have them keep till January, you must have one place in your Espallier, where there is little Sun.

* A caution not very necessary to us in England.

Martin sec, succeeds well in all Figures.

Bergamotte musqu , or *Poire de Sicile*, thrives best in Espalliers and Dwarf-trees.

DECEMBER.

To eat raw.

Micet, prospers best in Espalliers, and keeps till *January*.

Poire-Figue, prospers well in all Figures.

Roussellet d'Hyver, the same.

Bon-Chrestien, d'Anche cottelé, does best in Espallier, or in a good shelter from winds, in Standard.

Bon-Chrestien rond, the same.

Bon-Chrestien long, the same.

Bon-Chrestien doré sans Pepins, the same.

And note, that you are to have as many *Bon-Chrestiens* alone in an Espallier rightly plac'd, as of all other Winter-fruits put together; both because it is in taste incomparably better than all the rest, and also it begins to be fit to eat in *November*, and keeps good till the end of *August* following.

Poire

Poire de Froment, an excellent baking Pear, does well in Standards.

Baking Pears in December.

Fin Or, or *Franc-real*, in tall Standards, a few in Dwarf-Trees.

Dame Jeanne, the same.

Bon Evesque, the same.

Foulon, the same.

JANUARY.

To eat raw.

* *Gatellier*, or the Winter *Beurée*, prospers well in all Figures.

* *Ramboillet*, & *Monsieur de Noyers à Paris*.

* *Bergamotte d'Hyver*, to be eaten in *February* and *March*.

* *Monsieur Gaillard*, & *Monsieur de Moncy*.

Bon-Chrestien, of all sorts.

Orange d'hyver, prospers well in all postures.

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JA

JANUARY.

To Bake.

Poire d'Argent, does very well in great Standards.

Ratcau, the same.

* At Ponthoize. * *Herpiene*, the same.

Angobert, or *Languedoc*, the same.

Gros Certeau, the same.

FEBRUARY.

To eat Raw.

Saint Lezin, as also in *March* and *April*, prosper well enough in all postures; but are subject to fall, if not planted in *Espalliers*, and moreover, require a very great Sun.

* Monsieur *Saint Lezin Beuré*, a very rare and excellent fruit, will be planted in *Espallier*.

* de la *Chenaye*. * *Messire Jean tardif*, either Dwarf-tree or *Espallier*.

Bon-Chrestien, the same.

FE-

FEBRUARY.

To Bake.

Petit Certeau, prospers well in Standards or Dwarf-trees.

De la Domville, in tall Standards.

MARCH.

To eat Raw.

Portail, would be planted in *Espalliers*, and rather grafted upon a Wilding than a Quince, by reason it is not apt to run into much wood.

* *Gros Muscat d'Hyver*, a * Ponthoize, la *grosse queue*, does well either in *Espalliers* or Dwarf-trees. *Chefnaye*.

MARCH.

To Bake.

Poire de livre, or Pound-pear, in tall Standards.

K 4 APRIL

APRIL.

To eat Raw.

Bergamotte de Beugi, in Espalliers, or Dwarf-trees.

* Aux Gobelins
du Fauxbourg
St. Marceau.

* Monsieur
Ferrant.

* *Poire d'Estranguillon*, an excellent fruit, the same.

* *Virgoulette*, the same, an excellent fruit.

APRIL.

To Bake.

Liquet rond, in tall Standards.

Parmain, the same.

Bouvard, or *Chefne Galen*, the same.

MAY.

To eat Raw.

Double Fleur, prosper very well in Dwarf-

Dwarf-trees in the open Air, but better in Espalliers.

* *Fontarabis*, in Espalliers. * Ponthoize.

MAY.

To Bake.

* *Girolle*.

* Ponthoize.

of

*Of the Times wherein Fruits are
to be gathered.*

ALl Stone-fruits, and Summer-Pears, would not be separated from the Tree, till they are first arrived at their full maturity; but for the Autumn-Pears, as the Messire Jean, the Beuré; nay, even the Summer Bon-Chrestien, and the Bergamotte, if you desire to have them keep any time, it will be convenient to gather them before they be wholly ripe, to the end they may compleat their maturity in the place where they are to be bestowed; by which means they will both keep much longer, and also tast much sweeter and less tart, than those gathered ripe from the Tree. As to the Winter-fruits, whether to eat raw, or to bake, and whether Apples or Pears, you are to let them hang so long as ever you can upon the Tree, even to the

the end of *October*, and then take heed always to gather them in fair weather, and a bright shining Sun, to the end the fruit may be very dry, and without any kind of moisture upon them at the time of their gathering.

You should also be careful not to break the stalk of the fruits you intend to keep, and in gathering to touch them as little, and as nicely as you can.

The same thing is done to Fig-trees, that is done to the Espalliers, both in planting and Pallifadoing; and they are to be cut after the same manner with Apricots and Peaches in the decrease of the Moon in *March*, for as much as they are pithy and tender, and are impatient of the cold.

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